

PCTWORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : G01N 33/68, 33/50, C12Q 1/48	A1	(11) International Publication Number: WO 99/58982 (43) International Publication Date: 18 November 1999 (18.11.99)
(21) International Application Number: PCT/US99/10416 (22) International Filing Date: 12 May 1999 (12.05.99) (30) Priority Data: 60/085,439 14 May 1998 (14.05.98) US 09/156,367 17 September 1998 (17.09.98) US (63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Applications US 09/156,367 (CON) Filed on 17 September 1998 (17.09.98) US 60/085,439 (CON) Filed on 14 May 1998 (14.05.98) (71)(72) Applicant and Inventor: LIU, Ya, Fang [CA/US]; One Emerson Place 5G, Boston, MA 02114 (US). (74) Agents: CARROLL, Alice, O. et al.; Hamilton, Brook, Smith & Reynolds, P.C., Two Militia Drive, Lexington, MA 02421 (US).		(81) Designated States: CA, JP, US, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
(54) Title: METHOD TO IDENTIFY COMPOUNDS TO PREVENT NEURON DEATH (57) Abstract The present invention describes methods for identifying compounds that inhibit JNK and MLK kinase activity as drugs for treating a mammal susceptible to or having a neurological condition. This invention also discloses methods for preventing neuronal cell death and treating neurological conditions that involve neuronal cell death, particularly neurodegenerative diseases characterized by glutamine or kainate mediated toxicity, such as Huntington's disease and Alzheimer's disease.		

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/10416

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 G01N33/68 G01N33/50 C12Q1/48

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 6 G01N C12Q C07K C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	BIOLOGICAL ABSTRACTS, Philadelphia PA USA; Abstract no. PREV199799831122, abstract XP002115942 & Y.F. LIU ET AL.: "Expression of the Huntington mutant activates JNK / SAPK and induces neuronal apoptosis." SOCIETY FOR NEUROSCIENCE ABSTRACTS, vol. 23, no. 1-2, 25 October 1997 (1997-10-25), page 1909 New Orleans LA USA --- -/--	1-43

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

21 September 1999

Date of mailing of the international search report

06/10/1999

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Van Bohemen, C

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/10416

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	M. DICKENS ET AL.: "A cytoplasmic inhibitor of JNK signal transduction pathway" SCIENCE, vol. 277, 1 August 1997 (1997-08-01), pages 693-696, XP002076870 Washington DC USA abstract -----	1-43
A,P	WO 99 18193 A (UNIVERSITY OF MASSACHUSETTS) 15 April 1999 (1999-04-15) claim 1 -----	1-43

Information on patent family members

PLR/US 99/10416

Form PCT/ISA/210 (patent family annex) (July 1992)